

## Title (en)

METHOD TO MONITOR THE BREAKTHROUGH OF AN ADSORBENT BED IN A PROCESS FOR THE PRODUCTION OF ALKYL ESTERS FROM A VEGETABLE OR ANIMAL OIL AND AN ALIPHATIC MONOALCOHOL

## Title (de)

VERFAHREN ZUR ÜBERWACHUNG DES DURCHBRUCHS EINES ADSORPTIONSBETTES IN EINEM VERFAHREN ZUR HERSTELLUNG VON ALKYLESTERN AUS PFLANZEN- ODER TIERÖL UND EINEM ALIPHATISCHEN MONOALKOHOL

## Title (fr)

MÉTHODE DE SUIVI DU PERÇAGE DE LIT D'ADSORBANT DANS UN PROCÉDÉ DE PRODUCTION D'ESTERS ALKYLQUES À PARTIR D'HUILE VÉGÉTALE OU ANIMALE ET D'UN MONOALCOOL ALIPHATIQUE

## Publication

**EP 2147709 A1 20100127 (FR)**

## Application

**EP 09290461 A 20090617**

## Priority

FR 0804153 A 20080722

## Abstract (en)

Process for purifying a mixture of esters and glycerin on at least one adsorbent bed absorbing the glycerin, comprises detecting the drilling of the bed and/or measuring the quantity of glycerin present in the stream purified by turbidimetry, where the purification of the ester stream is carried out on at least two adsorbent beds placed in different reactors, one of the bed is in the adsorption mode and other in the regeneration mode. An independent claim is included for an installation comprising a zone for transesterifying vegetable or animal oil using aliphatic alcohol, a zone for alcohol evaporation present in the effluent obtained from the transesterification zone, optionally heat exchange zone, a glycerin separation zone including a zone for purification on adsorbents, a pipe (6) supplying a hydrogen flow of fatty acid alkyl esters and glycerin, where the purification zone comprises at least two fixed bed adsorbents placed in at least two reactors (R1, R2), at least one operating mode of adsorption and at least one mode of regeneration, and a pipe (7a, 7b) in outlet of reactors for making a diversion using a pipe (9) of a part of the ester stream and placing a turbidity meter for carrying out the measurement.

## Abstract (fr)

La présente invention décrit une méthode de suivi du perçage d'un lit d'adsorbants constitué par exemple de résines échangeuses d'ions, utilisé lors de l'étape de purification d'un flux d'esters contenant de la glycérine, par exemple obtenu dans un procédé de transestérification d'une huile végétale ou animale et d'un monoalcool aliphatique. Elle permet de détecter de façon instantanée à l'aide d'un turbidimètre placé en sortie du lit d'adsorbant la présence de glycérine dans le flux d'esters.

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## Citation (applicant)

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